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Stop misleading climate claims

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Dr Vicky Pope, Met Office Head of Climate Change, calls on scientists and the media to 'rein in' some of their assertions about climate change.

She says: "News headlines vie for attention and it is easy for scientists to grab this attention by linking climate change to the latest extreme weather event or apocalyptic prediction. But in doing so, the public perception of climate change can be distorted. The reality is that extreme events arise when natural variations in the weather and climate combine with long-term climate change. This message is more difficult to get heard. Scientists and journalists need to find ways to help to make this clear without the wider audience switching off.

"This diverts attention from the real, longer-term issues."

"Recent headlines have proclaimed that Arctic summer sea ice has decreased so much in the past few years that it has reached a tipping point and will disappear very quickly. The truth is that there is little evidence to support this. Indeed, the record-breaking losses in the past couple of years could easily be due to natural fluctuations in the weather, with summer sea ice increasing again over the next few years. This diverts attention from the real, longer-term issues. For example, recent results from the Met Office do show that there is a detectable human impact in the long-term decline in sea ice over the past 30 years, and all the evidence points to a complete loss of summer sea ice much later this century.

"This is just one example where scientific evidence has been selectively chosen to support a cause. In the 1990s, global temperatures increased more quickly than in earlier decades, leading to claims that global warming had accelerated. In the past 10 years the temperature rise has slowed, leading to opposing claims. Again, neither claim is true, since natural variations always occur on this timescale. For example, 1998 was a record-breaking warm year as long-term man-made warming combined with a naturally occurring strong El Niño. In contrast, 2008 was slightly cooler than previous years partly because of a La Niña. Despite this, it was still the 10th warmest on record.

"Again, natural variability has been ignored in order to support a particular point of view…"

"The most recent example of this sequence of claim and counter-claim focused on the Greenland ice sheet. The melting of ice around south-east Greenland accelerated in the early part of this decade, leading to reports that scientists had underestimated the speed of warming in this region. Recent measurements, reported in Science magazine last week, show that the speed-up has stopped across the region. This has been picked up on the climate sceptics' websites. Again, natural variability has been ignored in order to support a particular point of view, with climate change advocates leaping on the acceleration to further their cause and the climate change sceptics now using the slowing down to their own benefit. Neither group is right and all that is achieved is greater confusion among the public. What is true is that there will always be natural variability in the amount of ice around Greenland and that as our climate continues to warm, the long-term reduction in the ice sheet is inevitable.

"For climate scientists, having to continually rein in extraordinary claims that the latest extreme is all due to climate change is, at best, hugely frustrating and, at worst, enormously distracting. Overplaying natural variations in the weather as climate change is just as much a distortion of the science as underplaying them to claim that climate change has stopped or is not happening. Both undermine the basic facts that the implications of climate change are profound and will be severe if greenhouse gas emissions are not cut drastically and swiftly over the coming decades.

"When climate scientists like me explain to people what we do for a living we are increasingly asked whether we "believe in climate change". Quite simply it is not a matter of belief. Our concerns about climate change arise from the scientific evidence that humanity's activities are leading to changes in our climate. The scientific evidence is overwhelming."

Climate science explained